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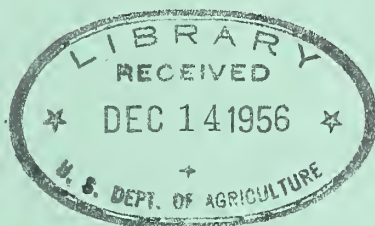
BOOK NUMBER

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FOREST STATISTICS FOR THE

PACIFIC NORTHWEST



1952 Timber Resource Review Data

U. S. Department of Agriculture, Forest Service,
Division of State & Private Forestry
R-6
Portland, Oregon

1956

FOREWORD

The purpose of this booklet is to present some of the more commonly used Timber Resource Review statistics for the Pacific Northwest.

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LAND AREA

The Pacific Northwest is in a favorable position for timber production with 44% of its area classed as commercial forest land. For the United States the area of commercial forest land is only 25%.

All signs point toward a substantial increasing population. This indicates additional pressures on forest land in the way of urban development, rights-of-way, industrial expansion and land to meet various agricultural requirements.

Further withdrawals of forest land require careful consideration. There is no excess of forest land and unplanned withdrawals can adversely affect future timber supplies.

Table 1 - Total Land Area of the Pacific Northwest

Unit	Forest Land				Nonforest Land			
	Land	Commercial	Non-commercial	Total	Crop	Pasture	Other	
	Area	1/	2/	Land	& Range			
	All M Acres							
<u>Oregon</u>								
Western	19,211	14,512	1,166	3,533	1,445	1,067	1,021	
Eastern	42,430	11,363	3,220	27,847	3,123	24,305	419	
	61,641	25,875	4,386	31,380	4,568	25,372	1,440	
<u>Washington</u>								
Western	15,889	10,943	2,426	2,520	562	514	1,444	
Eastern	26,854	8,547	1,952	16,355	6,444	9,242	669	
	42,743	19,490	4,378	18,875	7,006	9,756	2,113	
<u>Oregon & Washington</u>								
Douglas-fir Subregion	35,100	25,455	3,592	6,053	2,007	1,581	2,465	
Pine Subregion	69,284	19,910	5,172	44,202	9,567	33,547	1,088	
	104,384	45,365	8,764	50,255	11,574	35,128	3,553	

1/ Commercial Forest Land--Forest land which is (a) producing or physically capable of producing usable crops of wood (usually sawtimber); (b) economically available now or prospectively; and (c) not withdrawn from timber utilization.

2/ Noncommercial Forest Land--Forest land (a) withdrawn from commercial utilization for special purposes such as parks, wilderness areas, etc., but which otherwise qualifies as commercial forest land; or (b) unproductive from the standpoint of usable wood products, such as alpine forests, juniper, scrub oak areas, etc.

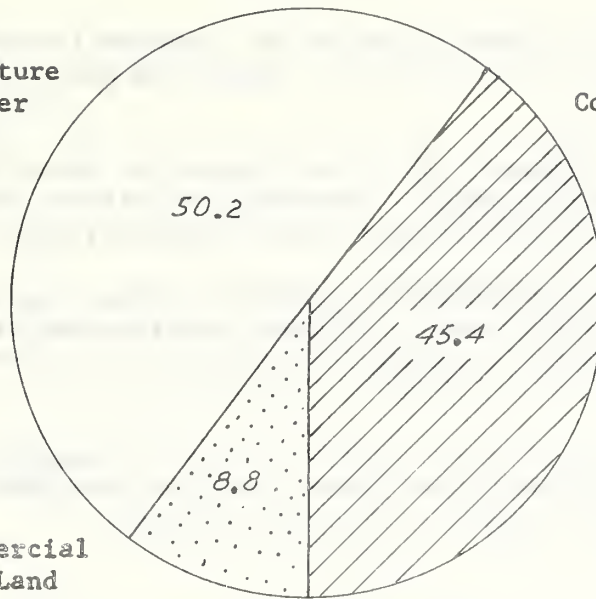
Chart 1 - TOTAL LAND AREA
(Million Acres)

PACIFIC NORTHWEST

Agriculture
and Other
Use
48%

Commercial
Forest
Land
44%

Noncommercial
Forest Land
8%

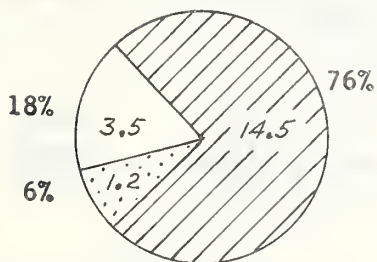


104.4 Million Acres

OREGON

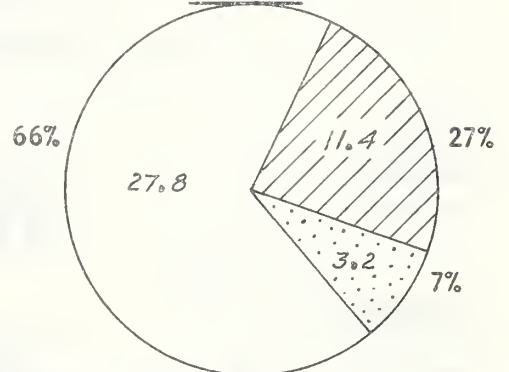
61.6 MM Acres

Western



19.2 MM Acres

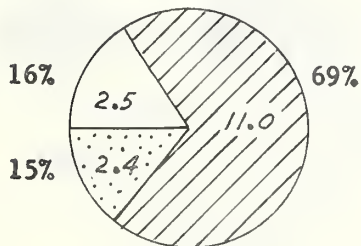
Eastern



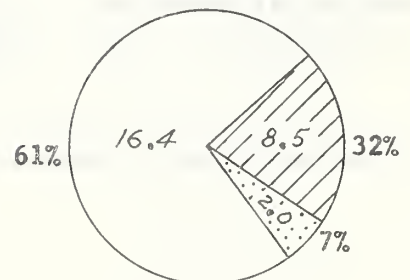
42.4 MM Acres

WASHINGTON

42.8 MM Acres



15.9 MM Acres



26.9 MM Acres

COMMERCIAL FOREST LAND

The availability of timber products for commerce is dependent on the quantity and condition of available commercial forest land and its ownership.

For the Pacific Northwest 43% of the commercial forest land is privately owned and 57% publicly owned. Generally the private lands are the most accessible and occupy the better timber producing sites.

Nationwide 73% of the available commercial forest land is privately owned and 27% publicly owned. Of great significance is the fact that only 25% of the Nation's commercial forest land lies west of the Great Plains.

At the present time there are about 3 acres of commercial forest land for each person in the United States. By the year 2000 it is predicted this will shrink to about 1 3/4 acres per person.

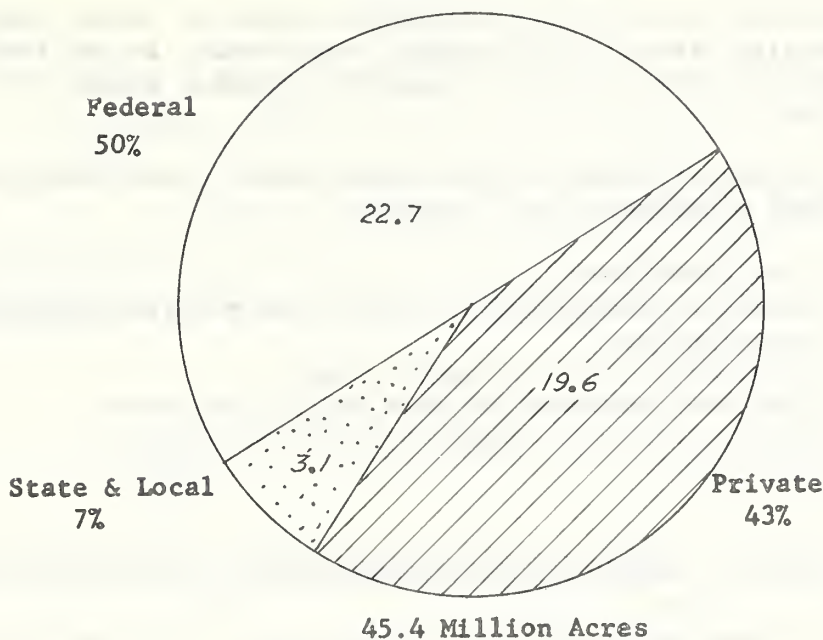
Table 2 - Total Commercial Forest Land Ownership in Pacific Northwest

Unit	: Total	: Public	:	:
	: all	:	: State and	: Private
	: Ownerships:	Federal ^{1/}	: Local	:
	- - - - -	All M Acres	- - - - -	- - - - -
<u>Oregon</u>				
Western	14,512	6,907	975	6,630
Eastern	11,363	8,160	65	3,138
	25,875	15,067	1,040	9,768
<u>Washington</u>				
Western	10,943	2,800	1,448	6,695
Eastern	8,547	4,783	653	3,111
	19,490	7,583	2,101	9,806
<u>Oregon & Washington</u>				
Douglas-fir Subregion	25,455	9,707	2,423	13,325
Pine Subregion	19,910	12,943	718	6,249
	45,365	22,650	3,141	19,574

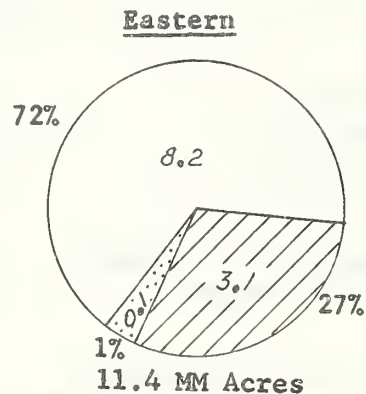
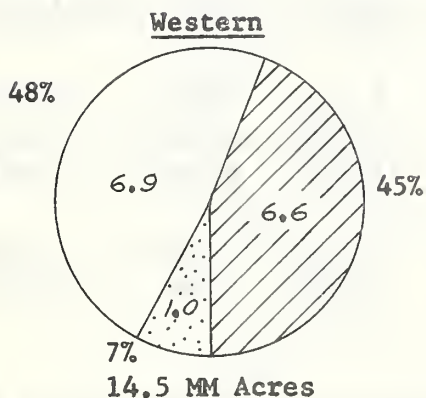
^{1/} Includes Indian lands in trusteeship.

Chart 2 - TOTAL COMMERCIAL FOREST OWNERSHIP
(Million Acres)

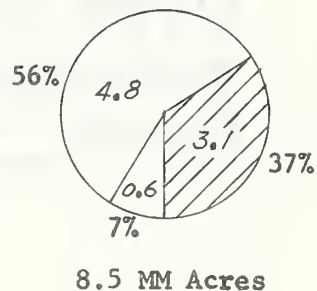
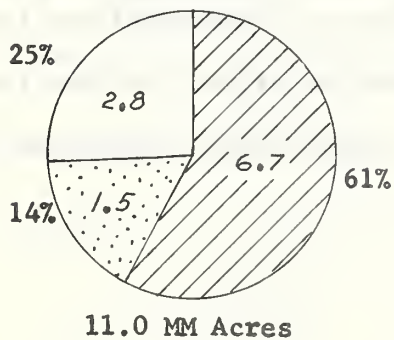
PACIFIC NORTHWEST



OREGON
25.9 MM Acres



WASHINGTON
19.5 MM Acres



TIMBER STAND-SIZE CLASS ^{1/}

Next in importance to sufficient available commercial forest land is the distribution of stand-size classes which occupy those lands. In the Pacific Northwest 63% of the commercial forest land area supports sawtimber stands (38% old growth and 25% young growth).

A well balanced distribution of stand-size classes, from seedlings to sawtimber, is necessary for a healthy forest industry.

To accomplish this requires:

1. Progressive cutting of old growth and resultant conversion to young stands.
2. Improvement cutting in young stands.
3. Improvement measures for pole and piling stands.
4. Better stocking on inadequately stocked areas.

Table 3 - Commercial Forest Land Area by Stand-Size Class

Unit	: Total	<u>Sawtimber</u>		: Seedlings :		
	: all	: Old	: Young	: Pole	: &	: Non-
	: Classes	: Growth	: Growth	: Timber	: Saplings	: stocked
	- - - - -	- - - - -	- - - - -	All M Acres	- - - - -	- - - - -
Oregon	25,875	11,581	6,373	3,946	2,534	11,441
Washington	19,490	5,797	4,925	4,564	2,953	11,251
Totals	45,365	17,378	11,298	8,510	5,487	2,692
Douglas-fir Subregion	25,455	7,468	7,143	4,542	4,260	2,042
Pine Subregion	19,910	9,910	4,155	3,968	1,227	650

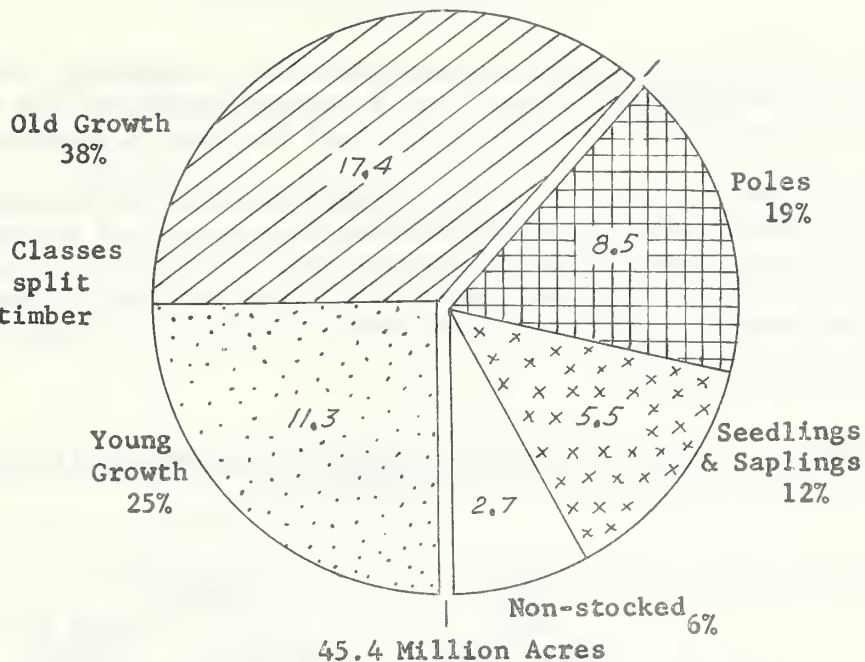
1/ Stand-size classes.

1. Old growth - Stands in which the majority of the volume is in trees more than about 160 years of age.
2. Young growth - Stands in which the majority of the volume is in trees less than about 160 years of age and 11.0 inches and larger d. b. h.
3. Poletimber - Stands in which the majority of the trees are from 5.0 inches to 10.9 inches d. b. h.
4. Seedlings & Saplings - Stands in which the majority of the trees are less than 5.0 inches d. b. h.
5. Nonstocked - Cutover or burned-over forest land on which the restocking, if any, is less than 10% density.

Chart 3 - TOTAL COMMERCIAL FOREST LAND AREA
BY STAND-SIZE CLASS
(Million Acres)

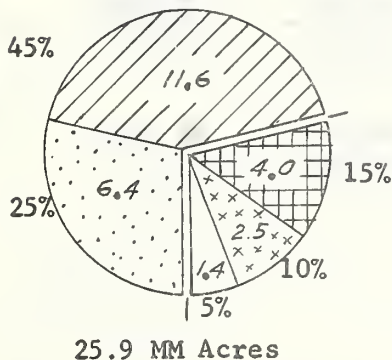
PACIFIC NORTHWEST

Note: Size Classes
to left of split
are of sawtimber
size.

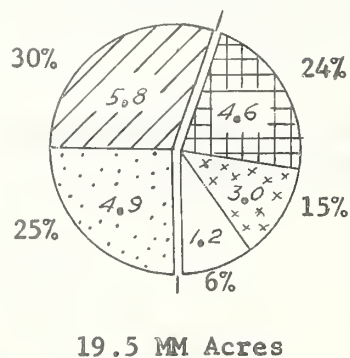


STATE TOTALS

Oregon

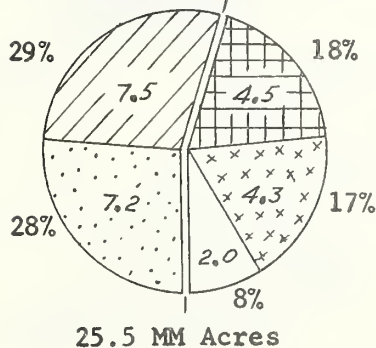


Washington

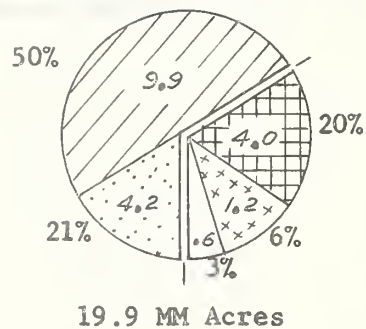


SUBREGION TOTALS

Douglas-fir



Pine



SAWTIMBER VOLUME

Nationwide the West with approximately 25% of the commercial forest land supports about 70% of the sawtimber volume. As a further breakdown 52% of the West's volume is in Oregon and Washington on 37% of the West's commercial forest land.

The current supply of fine old growth timber upholds this favorable balance for the West. However, when these stands have been converted to young stands and the Eastern lands become fully productive through better forestry the predominance of capacity to produce sawtimber will shift from the West to the East. Indications are that the capacity for future sawtimber production will approximate 30% for the West and 70% for the East.

Table 4 - Net Live Sawtimber Volume^{1/} on Commercial Forest Land
by Ownerships

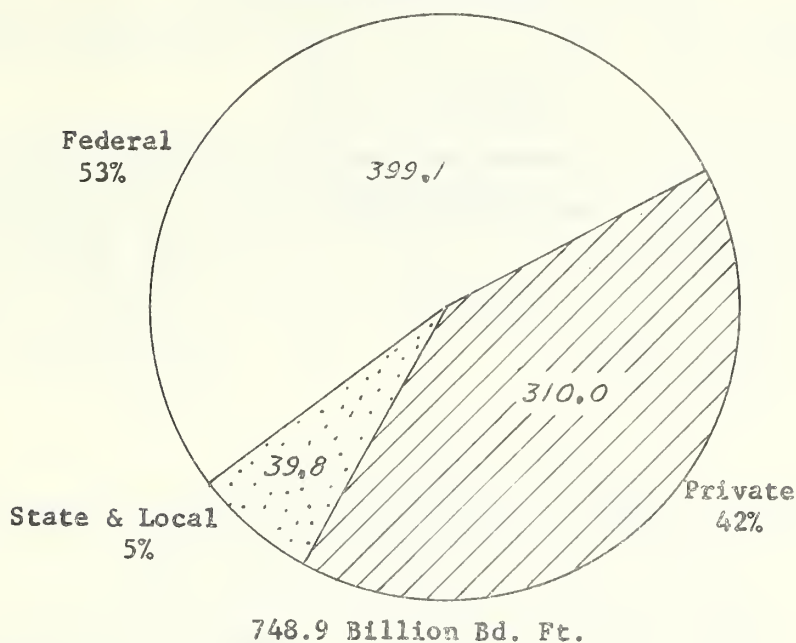
Unit	:	Total	:	Public		:
	:	all	:	State and		:
	:	Ownerships	:	Federal ^{2/}	Local	:
- - - - - All Million board feet - - - - -						
Oregon		433,809		266,780	13,582	153,447
Washington		315,067		132,302	26,179	156,586
Totals		748,876		399,082	39,761	310,033
Douglas-fir Subregion		594,375		288,403	35,100	270,872
Pine Subregion		154,501		110,679	4,661	39,161

^{1/} International $\frac{1}{4}$ -inch log rule. Sawtimber volume includes all live sawtimber trees 11 inches and larger, d. b. h.

^{2/} Includes Indian lands in trusteeship.

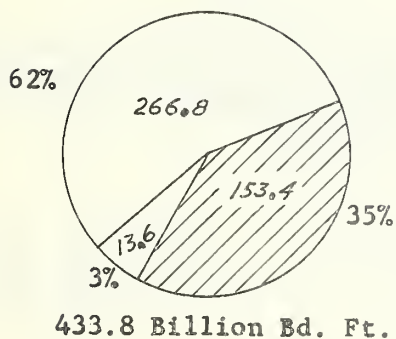
Chart 4 - NET LIVE SAWTIMBER VOLUME ON
COMMERCIAL FOREST LAND BY OWNERSHIP
(Billion Board Feet)

PACIFIC NORTHWEST

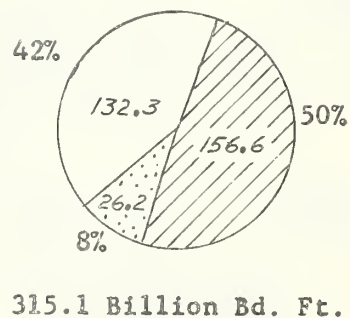


STATE TOTALS

Oregon

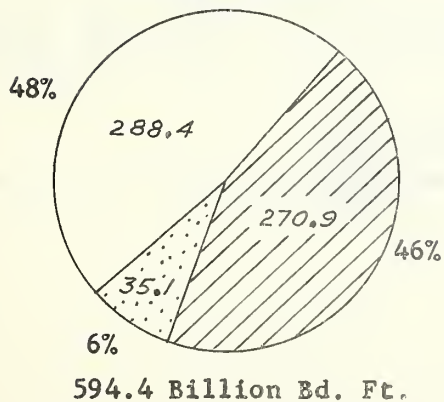


Washington

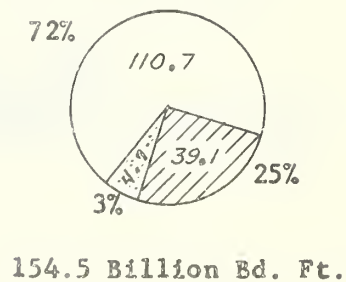


SUBREGION TOTALS

Douglas-fir



Pine



PRIVATE OWNER SIZE GROUPS

Advances in forest management have increased the potential for all forest lands. For the Pacific Northwest 50% of the privately owned commercial forest land is held by some 216 medium and large owners. It has been estimated that 1,000 foresters either directly or indirectly assist in the management of these lands.

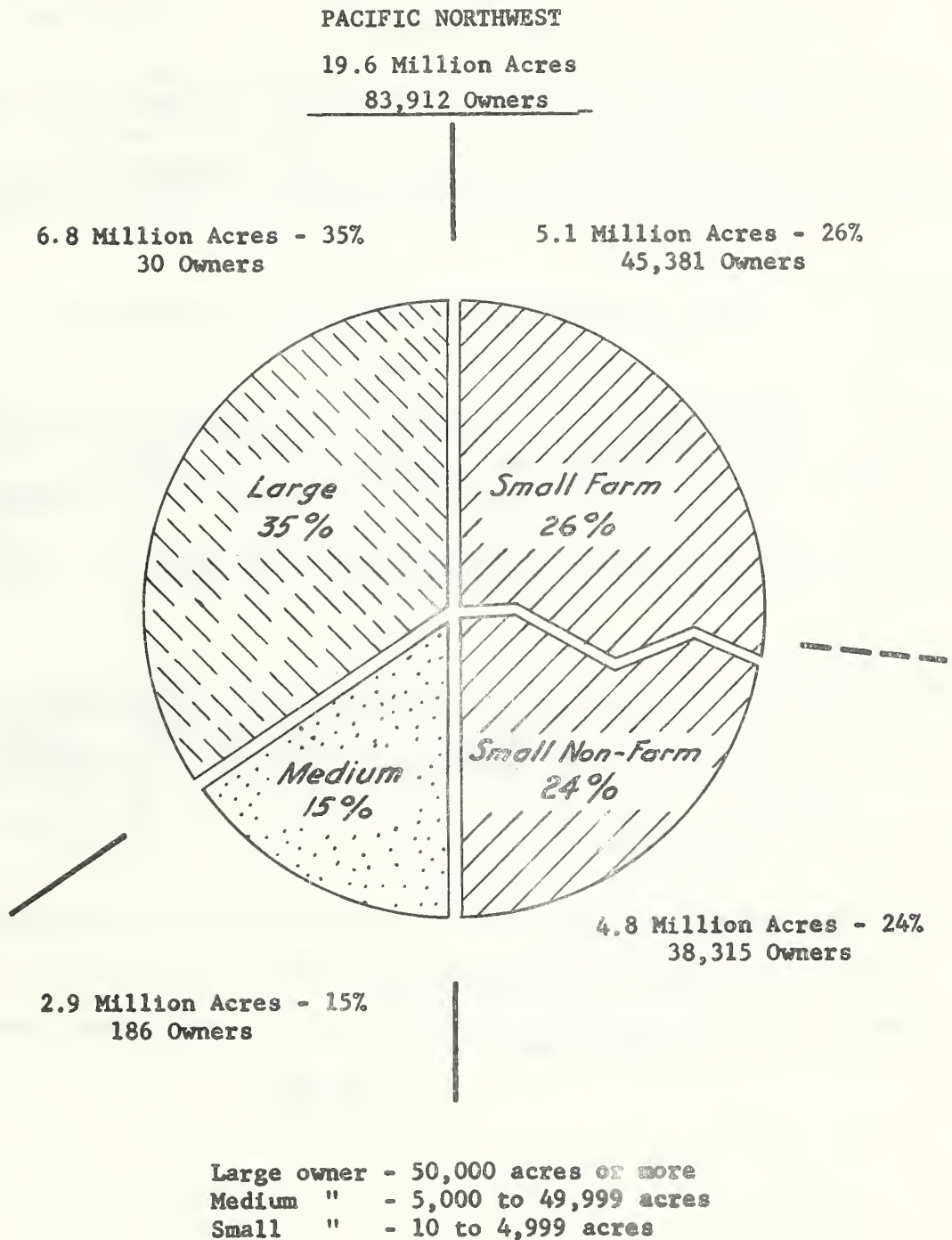
The other half belongs to some 83,700 small owners, representing farmers, ranchers, businessmen, professional people, housewives, wage earners, widows, small business enterprises and many others. Many of these woodland owners have no idea as to whether their management policies are good or poor. Many of these small owners do not recognize or are not concerned with inadequate practices on their forest land. This is very important as this class of ownership holds the key to our future timber supply. Ways and means to get this group to recognize and accept their full responsibility is a real challenge to forestry.

Table 5 -- Number of Owners^{1/} and Area of Commercial Forest Land
in Private Ownership

Unit	: Total All		:	: Large		:	: Medium		:	: Small - 10 - 5 M Acres			
	: Size Groups			: 50 M + Acres			: 5 M - 50 M Acres			: Farm		: Nonfarm	
	: No. 1/	: Area		: No. 2/	: Area		: No. 1/	: Area		: No.:	: Area	: No.:	: Area
	(M Acres)			(M Acres)			(M Acres)			(M Acres)		(M Acres)	
<u>Oregon</u>													
Western	31,277	6,630	12	1,711	87	1,282	19,640	1,906	11,538	1,731			
Eastern	4,980	3,138	5	905	42	847	3,171	1,239	1,762	147			
Totals	36,253	9,768	15	2,616	127	2,129	22,811	3,145	13,300	1,878			
<u>Washington</u>													
Western	36,711	6,695	14	3,631	48	524	2,029	1,098	16,620	1,442			
Eastern	10,961	3,111	9	508	16	242	2,541	881	8,395	1,510			
Totals	47,667	9,806	18	4,139	64	736	22,570	1,979	25,015	2,952			
<u>Oregon & Wash.</u>													
<u>Douglas-fir</u>													
Subregion	67,982	13,325	23	5,342	132	1,806	39,669	3,004	28,158	3,173			
Pine Subregion	15,941	6,249	14	1,413	58	1,059	5,712	2,120	10,157	1,657			
Totals	83,912	19,574	30	6,755	186	2,865	45,381	5,124	38,315	4,830			

^{1/} Number of owners not always additive, because some owners have land in both States or subdivisions of the States.

Chart 5 - PRIVATE COMMERCIAL FOREST OWNERSHIP BY
SIZE GROUP AND NUMBER OF OWNERS



PRODUCTIVITY

The term "productivity" as used here is intended to classify the ability of cutover forest lands to produce a future crop under conditions reasonably attainable for the locality, type and operating situation. The standards for measuring this did not represent the biological potential of the land, nor were they geared to the potential need.

Three broad classifications were established: High, Medium and Low. Various ownership groups were sampled and classified. The results point out clearly where the problem is most acute---in the small owner group. This group owns over 50% of the commercial forest land in the Pacific Northwest Region, but only 52% of their lands qualifies for the High rating.

Table 6 -- Productivity^{1/} of Recently Cut Forest Lands by Types of Ownership

Private

Unit (Subregion)	All Private				Large				Medium				Small			
	Operating		Productivity		Operating		Productivity		Operating		Productivity		Operating		Productivity	
	Area		Class		Area		Class		Area		Class		Area		Class	
	2/	High:Med.:Low	3/		High:Med.:Low		High:Med.:Low		High:Med.:Low		High:Med.:Low		High:Med.:Low		High:Med.:Low	
	(M Acres)	%	%	%	(M Acres)	%	%	%	(M Acres)	%	%	%	(M Acres)	%	%	%
Douglas-fir	9,273	79	15	6	4,349	94	4	2	1,775	75	16	9	3,149	60	28	12
Pine	3,324	62	32	6	1,315	94	6	-	442	64	36	-	1,567	36	51	13
Totals	12,597	75	19	6	5,664	94	5	1	2,217	73	20	7	4,716	52	36	12

Public

Unit (Subregion)	All Public				Federal				State & Local			
	Operating		Productivity		Operating		Productivity		Operating		Productivity	
	Area		Class		Area		Class		Area		Class	
	High:Med.:Low		High:Med.:Low		High:Med.:Low		High:Med.:Low		High:Med.:Low		High:Med.:Low	
	(M Acres)	%	%	%	(M Acres)	%	%	%	(M Acres)	%	%	%
Douglas-fir	8,667	87	11	2	6,647	89	10	1	2,020	78	13	9
Pine	9,898	85	14	1	9,435	87	12	1	463	39	45	16
Totals	18,565	86	12	2	16,082	88	11	1	2,483	70	19	11

^{1/} Productivity---A concept used to evaluate conditions for the next timber crop, on lands logged between January 1, 1947 and December 31, 1952.

^{2/} Operating Area---The combined area of forest types for each ownership group in which some cutting occurred during the period January 1, 1947 to December 31, 1952.

^{3/} Productivity Class---Conditions as found on the ground for recently cutover lands expressed in percent. Percentages grouped into 3 broad classes as follows:

0 - 39% - Low
40% - 69% - Medium
70% - 100% - High

Chart 6 - PRODUCTIVITY OF RECENTLY CUTOVER LAND
BY TYPES OF OWNERSHIP

PACIFIC NORTHWEST

Ownership			Proportion of operating area by productivity class		
Class	Total Area	Opera- ting Area			
	(Million Acres)		- percent -		
<u>All Private</u>	19.6	12.6	75	19	6
<u>Large</u>	6.8	5.7	94	5	1
<u>Medium</u>	2.9	2.2	73	20	7
<u>Small</u>	9.9	4.7	52	36	12
<u>All Public</u>	25.8	18.6	86	12	2
<u>Federal</u>	22.7	16.1	88	11	1
<u>State & Local</u>	3.1	2.5	70	19	11
			<div>High</div> <div>Medium</div> <div>Low</div>		

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